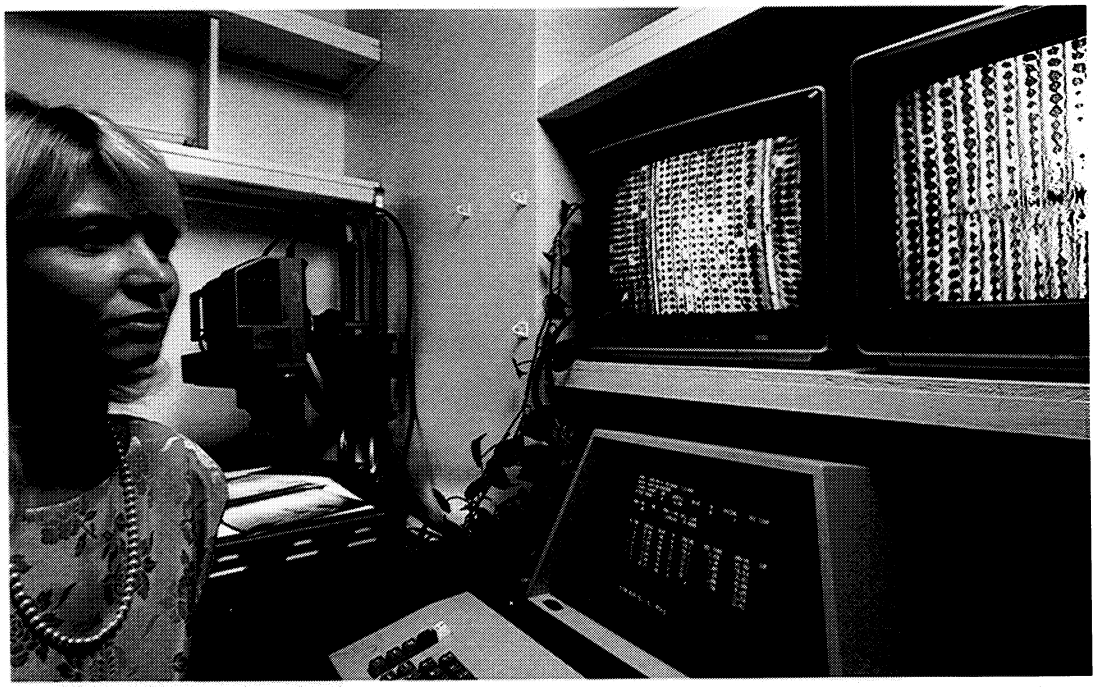

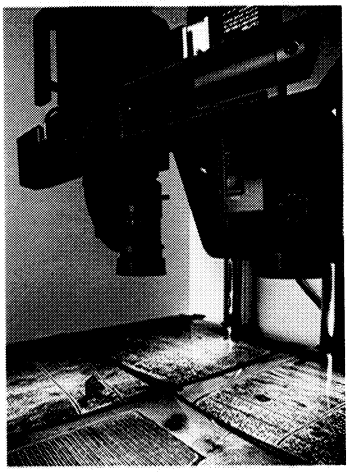

An aerial color infrared (ACIR) mapping system developed by Kennedy Space Center (KSC) has been adapted by Oliver Lowe, Property Appraiser for Florida's Charlotte County, for inventorying citrus trees as a basis for assessing citrus grove valuations. With ACIR, Lowe has been able to obtain more accurate property valuations while reducing the county's appraisal costs. As recently as 1981, it took two appraisers six to nine months to appraise the county's 8,500 acres of citrus; today, survey of the county's 10,000 acres takes one appraiser about 75 days with the help of the dual video system (above and left) for interpreting ACIR photographs. The video system was jointly developed by KSC and the Citrus Research and Education Center of the University of Florida.

Aerial photographic flights were made annually each June during 1983-1985 and the resultant photos interpreted by the video system, composed of paired color video cameras connected to two monitors; this system makes it possible to view two different annual images and detect changes that may have occurred from one year to the next. Differences found are verified by field visits, which additionally serve to determine the probable cause of tree losses, damage or decline. Appraiser Lowe invites citrus growers to view photographs of their properties (individual property boundaries are outlined in the ACIR transparencies) and see for themselves areas where problems may exist, thus eliminating many potential tree failures and enabling growers to plant citrus in areas where better chances of successful growth are indicated.

The Florida State Department of Revenue would like to see development of an image analysis system that would automatically survey and photointerpret grove images; such a system would make inventory and appraisal feasible and economical in counties with very large citrus acreages, where visual interpretation and data input would be too slow a process. KSC's Technology Utilization Office has awarded a contract to Dr. C.H. Blazquez of the Citrus Research and Education Center to adapt a prototype system that would automatically count trees and report a total of trees per block or grove. ▲